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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,601	07/02/2001	Anthony Cucinotta	D02194	5831
43471 7590 07/16/2007 GENERAL INSTRUMENT CORPORATION DBA THE CONNECTED HOME SOLUTIONS BUSINESS OF MOTOROLA, INC. 101 TOURNAMENT DRIVE HORSHAM, PA 19044				
			EXAMINER TRAN, TRANG U	
			ART UNIT 2622	PAPER NUMBER
			MAIL DATE 07/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/787,601

Applicant(s)

ANTHONY CUCINOTTA

Examiner

Trang U. Tran

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5-12 is/are rejected.
- 7) ☒ Claim(s) 13-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed May 23, 2007 have been fully considered but they are not persuasive.

In re page 2, applicant argues, with respect to claim 5, that the examiner cannot equate Yui's controller 80 AND Yui's read and write circuits 90 and 92 with the single claimed controller because, in order to try and make Yui anticipate the claims, the Examiner must switch from controller 80 to write and read circuits 90 and 92.

In response, the examiner respectfully disagrees. It is noted that the claimed controller of claim 5 does not specifically exclude the read and write circuits 90 and 92. Since it does not exclude the read and write circuits 90 and 92, the claimed controller is anticipated by Yui's controller 80 and read and write circuits 90 and 92.

In re pages 2-3, applicant argues, with respect to claim 6, that, since the examiner relies on Figure 9 to reject the base claim 5, it follows the examiner cannot the reply on Figure 6 to reject dependent claim 6.

In response, the examiner respectfully disagrees. It is noted that Fig. 6 is directed to an improvement of the first embodiment and Fig. 9 is also an improvement of the first embodiment. Since both Figs. 6 and 9 are improvements of the first embodiment, it is proper to use both Figs. 6 and 9 under 35 U.S.C. 102(b).

In re page 3, applicant respectfully requests, with respect to claims 9-12, that the examiner to provide a reference to showing these claimed elements and respectfully

requests the examiner to provide support for the assertion that Yui alone is less accurate than the proposed combination.

In response, Khan (US Patent No. 6,462,986 B1) is cited herein to show multiplexers are used to accurately controlling the reading the data from memories (see col. 14, lines 7-48).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 5-6 and 8 are rejected under 35 U.S.C. 102(b) as being anticipate by Yui (US Patent No. 4,578,812).

In considering claim 5, Yui discloses all the claimed subject matter, note 1) the claimed a controller is met by the controller 80 (Fig. 9, col. 10, lines 25-66), 2) the claimed first, second, third, and fourth memories, responsive to said controller is met by the line memories (buffer memories) 82, 84, 86 and 88 (Fig. 9, col. 10, lines 25-66), 3) the claimed an input address bus, connected between the controller and the memories is met by the write address bus, from the write controller 90 (Fig. 9, col. 10, lines 25-66), 4) the claimed an output address bus connected between the controller and the memories is met by the read address bus from the read controller 92 (Fig. 9, col. 10, lines 25-66), 5) the claimed a first service input connected to the first and second memories is met by the memory 30' (Fig. 9, col. 10, lines 25-66), and 6) the claimed a

second service input connected to the third and fourth memories; and an output bus connected to the first, second, third, and fourth memories is met by the memory 30' and the output bus (Fig. 9, col. 10, lines 25-66).

In considering claim 6, the claimed further comprising a plurality of control multiplexers operatively connected to the controller, each for controlling a respective one of the memories is met by the plurality of the multiplexers 218, 232 and 234 (Fig. 6, col. 8, lines 7-27).

In considering claim 8, the claimed further comprising an output data bus connected to each of the memories is met by the read address bus from the read controller 92 (Fig. 9, col. 10, lines 25-66).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yui (US Patent No. 4,578,812).

In considering claim 7, Yui discloses all the limitations of the instant invention as discussed in claim 5 above, except for providing the claimed wherein the controller comprises a field programmable gate array. The capability of the using the controller comprises a field programmable gate array is old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill

in the art at the time of the invention to incorporate the old and well known using of the controller comprises a field programmable gate array into Yui's system in order to increase accurately in controlling the memories.

In considering claim 9, Yui discloses all the limitations of the instant invention as discussed in claims 5 and 8 above, except for providing the claimed further comprising a first output multiplexer operatively connected between the first and second memories. The capability of the using a first output multiplexer operatively connected between the first and second memories old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of a first output multiplexer operatively connected between the first and second memories into Yui's system in order to increase accurately in controlling the memories.

In considering claim 10, Yui discloses all the limitations of the instant invention as discussed in claims 5 and 8-9 above, except for providing the claimed further comprising a second output multiplexer operatively connected to the first output multiplexer and between the third and fourth memories. The capability of the using the controller comprises a second output multiplexer operatively connected to the first output multiplexer and between the third and fourth memories is old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of a second output multiplexer operatively connected to the first output

multiplexer and between the third and fourth memories into Yui's system in order to increase accurately in controlling the memories.

In considering claim 11, Yui discloses all the limitations of the instant invention as discussed in claims 5 and 8 above, except for providing the claimed further comprising a first input multiplexer for directing data into the first and second memories. The capability of the using a first input multiplexer for directing data into the first and second memories is old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of a first input multiplexer for directing data into the first and second memories into Yui's system in order to increase accurately in controlling the memories.

In considering claim 12, Yui discloses all the limitations of the instant invention as discussed in claims 5, 8 and 11 above, except for providing the claimed further comprising a second input multiplexer for directing data into the third and fourth memories. The capability of the using a second input multiplexer for directing data into the third and fourth memories is old and well known in the art. Therefore, the Official Notice is taken. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the old and well known using of a second input multiplexer for directing data into the third and fourth memories into Yui's system in order to increase accurately in controlling the memories.

Allowable Subject Matter

6. Claims 1-4 allowed.

Claim 1 identifies the distinct features: "storing a plurality of lines of data from a first service in a first memory during a first write cycle; storing a plurality of lines of data from a second service in a third memory during the first write cycle; storing a second plurality of lines of data from the first service in a second memory during a second write cycle; storing a second plurality of lines of data from the second service in a fourth memory during the second write cycle; reading selected lines of the data in the second and fourth memories during the first write cycle; and reading selected lines of the data in the first and third memories during the second write cycle". The closest prior art, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

7. Claims 13-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 8, 2007



Trang U. Tran
Primary Examiner
Art Unit 2622